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THE FARMER.

SATURDAY, AUGUST 31, 1833.

THE BLIGHT OF THE PEAR TREE,

In its ordinary appearance, has not shown itself but partially, either this or the last season, about Albany, and hopes are entertained that it will wholly disappear. This disease appeared in Kingston in 1802, and nearly disappeared there in 1808. It appeared there again, and about Albany, in 1826–7—and has been diminishing the three last seasons. The same disease appeared upon the apple, many trees of which were wholly destroyed by it. In an orchard of nearly 200 pear trees, no appearance of blight, upon the limbs, has shown itself this season, and but two or three apple trees have been partially affected.

The ordinary attack of the blight was upon the limbs, and of the recent growth, at a distance from the terminal buds. It was first indicated by the bark becoming discolored, the leaves then turned brown, and the termination of the limb often remained green and fresh for days after the bark below was withered and black. The elaborated sap evidently became vitiated, and carried the disease with it in its descent. No preventive was known; and the best practice was to cut off the diseased limb, at a point where the wood remained healthy, and burn it. I have several trees from which the limbs were almost wholly cut, in a diseased state, which are now putting forth new branches and showing fruit. Where the diseased limbs were suffered to remain, the blight extended to the bole or trunk, and the entire tree, particularly when small, was destroyed. I have probably lost more than a hundred trees, not more than six or eight of which had produced fruit. The blight appeared in my grounds before any of the trees produced blossoms, and there was no bearing pear trees within a mile of me.

During the two or three last seasons the pear has been subject to another, or perhaps the same disease, in a modified form. Irregular patches of the bark upon the bole and large branches, have become dead, without any apparent cause, sometimes encircling the trunk or branch, and at others extending longitudinally. The dead bark would ultimately separate from the wood. In searching for the cause of this phenomenon, I learnt that some of the larch forests of Germany had at different periods been partially destroyed by myriads of a minute insect which preyed upon the inner bark of the tree. Deeming the chloride of lime an antidote to poison, and likely to be destructive to the small insect tribes, I two years ago applied it, diluted with water, to two or three trees, with apparently good effect. This spring, finding my pear trees more or less affected in this way, I made an application of the chloride, with a brush, in like manner, to the whole; and my trees have now the most healthy appearance. I state the facts as they appear to me, without pretending to say that I have either detected the cause of decay, or discovered a remedy for the evil. B.

CLOVER, ORCHARD GRASS, PLASTER, &c.

We have the pleasure of presenting our readers with the following extract of a letter from a gentleman of eminence residing in the vicinity of Philadelphia, and a practical farmer of great experience and observation. It was written in answer to certain inquiries which we instituted; and it will be perceived that it relates to several subjects which have not been generally well understood in this district. We think our farmers will peruse it with much interest.

He has chosen to apologize for his style. We admire the raciness of unpremeditated language for plain facts and frank opinions; and we have therefore been unwilling to alter a single sentence. In one place, some of our readers may think him severe; but on considering the matter, we deem it best to preserve the passage, the idea of any thing personal being entirely out of the question:

"I have known no substitute for *clover*, as it grows all the season, keeps the ground open, and improves the soil; yet we have found it advisable to mix other grasses with it, as it generally suffers in the second winter, and is often almost destroyed by the third. The mere cultivation of clover requires the ground to be fallowed every third year, which is too frequent to keep the soil improving. There is something too in unmixed clover that cattle often do not relish, either in pasture, or in fodder, and we therefore mix with it, some of the natural grasses. *Timothy* suits best, as it gives the most abundant crop, agrees well with the clover while it lasts, and succeeds it, when destroyed by the frost. Timothy produces however, but little after-math. We also think it draws hard on the fertility of the soil.

"*Orchard grass* requires a stronger soil. We think it gives much less amount of fodder, and I have never seen that and clover flourish well together. It will produce however, a reasonable quantity of pasture or fodder. It matures earlier than any other grass we have, by a fortnight. It vegetates the whole season, and appears to make sweet and nourishing pasture. Our soil is a stiff calcareous loam, and requires vegetables adapted to such a soil. I have no doubt but the orchard grass suits a well manured granitic loam better than ours; and that on such a soil it is a most valuable grass for fatting cattle and for dairy purposes.

"Orchard grass is of very easy culture, and like timothy, in an open soil re-sows itself. The seed early matures, and must be gathered without delay, as when ripe, a strong wind will blow off the seed. When in quantity, it requires care to keep it from heating. It may be sown in either fall or spring; but sown on small grain in the fall is best, as it comes sooner to maturity.

Herds grass * is often raised, though I do not like it on upland. Where it grows it takes up the whole ground. I have tried the *Lucerne*, and found it would do nothing in our soil however well prepared. I think Judge Buel says he has grown it successfully on a rich and dry alluvion near Albany. I have also tried the *Burnet*, and am well satisfied it promises little for field culture. I have not been able to get any *Sain Foin* that would vegetate.† Rye grass or Ray grass seems too delicate for profitable culture, though it grows tall and bears a nourishing seed. After a long course of trial however, we find clover and timothy the most profitable for our soil. We plough every fourth or fifth year.

"I have come to the conclusion that either our fathers had ascertained what plants suited our soil and climate best; or, that they had naturalized and acclimated those we find most eligible. I am not aware that any thing has been added to the list of our cultivated plants since my time, though I have tried a great many. The wheats of Africa, Spain, and South America, have been described as wonderfully productive, yet it remains an undetermined problem, whether they could be made an object of any value here. So of barley, spetz, and other grain. I have tried the flax of Portugal with a large seed, but it is a very inferior plant to the better kinds we raise in this country.

"It is to me singular that people are to be found whose prejudices have become inveterate, without much inquiry or observation. So it has been and I suppose will be. To overlook the Chess *mania* and others, I could hardly have expected any man at this day to have come forward to "protest against the use of Plaster"‡ in any way or form whatever, in large or small quantities as injurious to land. I have experienced its use on the same farm for about forty years, and can assert with great clearness that I have found it a most valuable manure, producing the most visible effect, and a continued benefit. There is much about its *modus operandi* but little understood, which in a great degree eluded the inquiries of that eminent philosopher Sir Humphry Davy. He admitted that in America and Germany its efficacy as a manure had been well ascertained, while in France and the British Isles it had no such character.‖ He found it present in the British soil, and thence concluded it was not wanted as an application.

"We have found it necessary to apply quick lime to our grounds at periods of from six to nine years, to keep it fertile, and the herbage

* Our Red Top is the *Agrostis vulgaris*; but it appears that some farmers in that district do not distinguish it from the *Agrostis alba*; calling both kinds *Herds grass*, according to Dr. Darlington. We know not to which our correspondent refers, but their qualities are similar.—*Ed. Gen. Far.*

† We have been more successful. The fresh seed vegetates freely.—*Ed. Gen. Far.*

‡ Gen. Farmer, Vol. 3. p. 141.

‖ As early as the year 1810, however, it was found a valuable manure in England *on calcareous soils*. In a letter from Robert Barclay, Esq. to Judge Peters, it is mentioned that *six thousand acres* near Feversham in Kent were "under plaister." See Memoirs of the Philadelphia Society for promoting Agriculture. Vol. 2. Appendix, page 114.—*Ed. Gen. Far.*

sweet and wholesome both for pasture and fodder. We might almost as well abandon the plough as the use of lime in our soil. Next after lime and barn-yard manure, we value plaster. Sometimes, I have not been able to witness much effect from it—sometimes none—but generally its effect is obvious, and often wonderful. It is most operative in wet seasons, producing much less effect in dry ones. In the ten years of unusual drouth, which occurred a few years back, it seemed to have little effect. Our grounds having been saturated with it, what was then recently applied, appeared to add nothing to their productiveness. In latter seasons, it has had a most obvious effect. I have a field where the grass has been mown two seasons, and a strip of it has been left without plaster. The grass on this strip has been much lighter than on the plastered ground on both sides; but its growth and color are so glaring as to be visible as far as the field can be seen.

"Some time ago Judge Buel wrote upon Plaster, recommending its use; and among other judicious suggestions, advised its application early, even in the winter. I agree with him in his theory, as its non-effect, I apprehend, often occurs from want of time and moisture. We are told by Chaptal that it is soluble in five hundred times its weight of water. It is known that all calxes are soluble, and that what is soluble may act as a pabulum for plants; but whether it is in itself a food for them, or only an agent to make food, I am not about to determine; but moisture I am confident is necessary to make it have its effect. This season I sowed early, and the effect was visible in the crop, which was better than my neighbors'. A light application is best. A teaspoonful is as good for a hill of corn as half a peck. Why is this? For all practical purposes this is enough. Half a bushel finely ground and well distributed is found as efficacious as Jacob Barge's sixteen bushels.

"Quick lime and plaster have renovated this country, not of themselves, but by giving the means of supporting a tenfold live stock, and filling our barn-yards with the best of all manures. In my long experience, I can safely say, I never saw a shovelful of dung applied without obvious benefit, either on green or ploughed crops. Lands are always improved in proportion to the application of barn-yard manures. In our stiff soil, lime however is indispensable.

"These hasty observations are the substance of what I know and believe on these heads. I have become very little of a writer, and I have almost lost my style with the practice.

"We have abundance of fruit and very fine. The cherries and plums were never finer, and we have many varieties. The pears are also abundant. Our country is in good health. We have had a moist season: grass in abundance, wheat and rye, light; oats very fine."

A PETRIFACTION.—Baron Steuben died of apoplexy at Steuben, Oneida Co. N. Y. in November 1795. Agreeably to his request his remains were wrapped in his cloak, enclosed in a plain coffin, and deposited in a grave without a stone. Many years after, as we learn by a memoir in the N. Y. Com. Advertiser, his body was disinterred for the purpose of burial in another place, and it was found to have passed into a state of complete petrification, and is believed to remain in that state of preservation to this day. The features of his face were as unchanged as on the day of his interment.

THE WHEAT INSECT.

The *Wheat Insect*, whose first appearance about Albany we lately noticed, is making a gradual but certain progress south and west, and in all probability will ere long extend its ravages to West New York. Every suggestion which may tend to ward it off, or to mitigate the threatened evil, therefore, is deserving of notice. We have conversed with a very intelligent neighboring farmer, whose wheat field, this year has been visited by the insect. He says it appeared almost exclusively upon the borders of the field, and its injury was confined to a belt of some 20 or 30 feet, extending farther towards the center at the corners than elsewhere, and was most perceptible under and near trees. The presence of the insect is readily detected by the appearance of the grain, the ears or heads in which they are found, standing erect, in consequence of the grain being in a measure destroyed, and the ear therefore light.

Mr. Gorrie, whose communication in the Edinburgh Quarterly Journal of Agriculture, we noticed in No. 17 of our present volume, states, that the fly appears as soon as the temperature of a week or ten days, in the spring, rises to 57 or 58°; if before the ear has burst the sheath, they are perfectly harmless; but if about the time they fix themselves upon the glume, and deposit clusters of eggs upon the stigma, from this moment vegetation ceases; the anthers do not expand, and the filaments that support them, appear glued to the chaff. In nine days the caterpillars appear fully formed, of a sulphur color, and devour the embryo grain. When the ear is fully developed, and about an inch above the sheath, the fly never attempts to lay its eggs upon it. We repeat these facts, as they seem to indicate, that very early or late sown crops will be more likely to escape injury, than those which are sown at the ordinary seed time. Mr. Gorrie states the damage done by this insect, in three years, in two districts of Scotland, at $400,000, a fact sufficient to excite alarm and vigilance in this great wheat growing district. We hope experiments will be made which may confirm or disprove this influence. In the mean time we will state a remedy which our neighbor has suggested, and which he will try next spring. It is to sow fresh slacked lime on the crop, a few days after the ear has protruded, and when there is a heavy dew. The belief is, that the moisture impregnated with the lime, will reach the insect, and will destroy it by the causticity of the lime. This belief is strengthened by the fact, generally accredited, that a similar application of lime will destroy the Hessian fly. Among many evidences of the latter fact, we will state but one. The farmer to whom we have already referred, sowed a barrel of lime upon a field of two or three acres of wheat, in the spring, some years ago, which entirely escaped the fly, while another field near by, which was not limed, and most of the wheat in the neighborhood, was nearly destroyed by it. The experiment will cost but little, while the saving may be great. The lime may be readily thrown from the water-furrows between ordinary ridges, without detriment to the standing grain.

E.

INFLUENCE OF THE MOON.

In our columns of to-day, will be found an EXTRACT from the Foreign Quarterly Review, on this subject, which merits an attentive perusal. Every intelligent mind must be gratified when the lights of science, like the rays of the burning glass, are brought to bear on *popular notions*, and which must either illumine or dissipate them.—M. *Arago* is eminent among the philosophers of France.

It is so much easier to *adopt* than to *examine* an opinion, that we have long considered popular evidence on matters of this kind as possessing very little weight. In days past, we have often heard it repeated in remarks on *bad* weather, "It will soon be over, the moon changes to-night," or something of similar import; and the notion was probably imported from Europe where it extensively prevails. Yet it appears from the recorded observations of *Pilgram* at Vienna, which extend over 52 years, that the fewest changes of the weather happen at the time of the new moon. This result however is not to be taken as a rule.

In some parts of the United States, great reliance is placed on the time of sowing or planting certain vegetables; the potato and the cabbage, for instance, and which are said to require opposite phases of the moon to produce them in perfection. To this notion, we oppose the practice of the best cultivators, in Britain, who entirely disregard it, if we may judge from their publications; and we also oppose our own practice, never failing to have fine crops of both cabbage and potatoes, or parsneps and peas, although we esteem that sage maxim so lightly as never to remember it at the time of sowing or planting.

A BAT USEFULLY EMPLOYED.

The common house-fly had become extremely numerous in the kitchen of a friend of ours, from which detachments passed into other parts of the house to the great annoyance of his family. An attempt to drown many hundreds of them in soap suds, was successfully made; but this was only a slight subtraction from the main body which received daily accessions from abroad. The other day, on going into the kitchen, he observed that most of the flies had disappeared, and inquired of the girl if she knew the cause? She replied that two or three nights before, she had *shut in* a bat, when she closed the doors and windows; and saw that the flies were much thinner next morning.—The bat has not since been seen, though he probably hides there in some hole or dark corner, for the flies are evidently on the decrease.

We would not give an undue importance to trifles, but some may think with Uncle Toby that a release from the teasing of a fly, is worth an effort; and should any in consequence of this notice wish to try the experiment we would suggest that after dark, the door or windows of the apartment should be left open with only a *dim light* burning. A dark corner might also be provided for his retreat in the day time. Bats are so common in summer, that we expect that one or two might be obtained in this way, at almost every farmer's house.

PLANTING VINES DEEP.—N. Herbemont, in the Southern Agriculturist, advocates the plan of planting vines deep, and suppressing yearly the surface roots. Thus managed, the fruit will not be subject to rot, as the roots will not be subject to such sudden extremes of moisture and dryness.

For the Genesee Farmer.

MANAGEMENT OF DIFFERENT SOILS.

In perusing articles on husbandry, the thought has often occurred that writers, when speaking of the management of land, do not point out with sufficient clearness, the description of the soil they are speaking of, or the treatment which different soils require. This treatment relates to manure, time of ploughing, &c.

It must be evident to every enlightened farmer, that that kind of management which would be very proper for clay, would be altogether unsuitable for sand.

Clay, or where clay predominates, requires the most warming manures; and it will operate most beneficially, when deposited *in* the soil previous to fermentation; as this process has the effect to separate the particles of earth, as well as to warm them. Horse and sheep dung, and straw, have these effects. Sand is also a great improvement of such soils.

The time and manner of ploughing heavy soils, are matters of the first importance to the farmer. Those soils which bake and crack in the dry season of the year, may be rendered mellow, and far more productive, by *deep fall ploughing*. The reasons in favor of fall ploughing are obvious.—Clay, clay-loam and marl, when ploughed in autumn, and left in a rough state through the winter, are pulverized by the action of frost, so that when harrowed in the spring, they are in a fine state for spring crops. Another benefit is, that if the ploughing be done late in the fall, those great enemies to the corn crop, the grub and cut worm are mostly destroyed. And ploughing in the fall when our teams are strong, and having the land ready for early planting in the spring, are advantages too important to be neglected.

I now come to the subject of ploughing *deep*, and I wish it was in my power to convince my brother farmers, of the necessity and importance of turning up soil which was never before exposed to the sun and air.

Every farmer of observation must have noticed that crops on the most tenacious soils, are those which suffer most in a season of extreme drouth, and this is easily accounted for. Rain on such soils cannot penetrate much deeper than they are ploughed, which is generally 3 to 5 inches; and of course, all mosture is soon exhausted by our summer heat; and the sub-soil being impervious to water, no supply can be drawn from a greater depth than the plough has reached. Nor can the roots of plants extend much deeper—they are generally confined to that part of the soil which has been disturbed by the plough; and of course, receive twice the nourishment where the land has been ploughed 8 inches, than if ploughed but 4 inches. If this be true, and that it is so, I can affirm from my own observation and experience, it is of vital importance to the farmer that he plough *deep*.

The management of sandy soil shall be the subject of another communication. ONTARIO.

☞ A writer in the Providence Daily Journal mentions that Miss Diana Colwell, wove last week in the Mill in the village of Blackstone, fifty pieces of cotton cloth, each containing twenty-eight yards, making in all one thousand four hundred yards; and at the price paid for weaving, her wages amounted to nine dollars.

For the Genesee Farmer.

ON MILDEW.

Mildew is a disease which but few Agriculturists or Gardeners are unacquainted with its destroying effects, and but few of whom have been able to explain the source from whence it originates. This pest to the vegetable world has recently formed the subject of a lecture, delivered by Professor Lindley at the Horticultural Society's Meeting Room in London, and the substance of this lecture has been condensed by "J. W. L.," and the abridgment published in the June number of "Loudon's Gardener's Magazine." Considering this subject as of great importance to every individual whose avocations may be concerned either in the garden or field, I shall endeavor to give the substance of Dr. Lindley's remarks in a condensed state, for the benefit of the readers of the Genesee Farmer, who may not have the opportunity of perusing the lecture in its original form.

The Professor states that mildew is often confounded with blight, honey-dew, &c., and that one most important error exists respecting it, which is generally entertained by agriculturists and gardeners, viz: that one kind of mildew will infect several kinds of plants; but he says this can never be the case, as each tribe of plants has a mildew peculiar to itself, which cannot, under any circumstances, affect plants of a different kind.

Mildew generally appears on the leaves or stems of plants, in the form of red, white, or black spots, as a number of minute projections, as a frosty incrustation, or as a brownish powder; in every case spreading more or less rapidly according to its kind, and in its progress withering the leaves, destroying the fruit, and finally killing the plant. Various popular reasons have been assigned for this pest, insects, fog, and oxygen gas in the air, all of which have been proved to be erroneous. Mildew is nothing more than different kinds of fungi* or parasites, attacking different kinds of plants and varying in appearance and species according to the nature of the plants which they attack.

The fungi, commonly called mildew, are divided into three classes. 1. Those which grow, or rather lie on the surface of the leaves. 2. Those which are formed in the interior of the stem or leaf; and 3d, those which only attack the roots: they seldom appear (in England) but in autumn. The first class injure a plant by preventing its respiration. This class generally attack cabbage, &c., and the most common is the Clindrosporium concentricum. These have the appearance of small white patches, or specks, of frosty incrustation. They are filled with seed, and burst when it is ripe, scattering it in every direction: and thus the fungus spreads rapidly. Mildew which attacks rose trees and other flowering shrubs is a kind of Uredo. The superficial mildew which infects the onion is called Botrylis. The pea and bean have a superficial mildew, Uredo Fabæ which spreads along their leaves, like white roots curiously interlaced. From these roots spring a number of branch-like shoots, each bearing a ball-like head, or brown berry, which when ripe bursts and discharges seed.

The second class of fungi, viz. those which spring from the interior of leaves and stems are by far the most fatal. The oak and other forest trees suffer severely from this class:—a species of this kind infects grain and is highly injurious to the agriculturist. This fungus however is found only on barley, and differs from the Uredo Segetum, or Smut, which is destructive not only of barley, but also of wheat and oats.

The principal fungi of the third class, or those which attack the roots of plants, are two. Rhizoctonia crocorum, and Periola tomentosa, which are very destructive to potatoes, lucerne, &c. Its ravages are often attributed to grubs.

All these species are very easily propagated, from the rapidity with which they arrive at maturity, and the immense number of seeds which they produce. One plant will be sufficient to propagate 250,000,000. The first class appears to be communicated by the air, the seeds when ripe being carried by it from one plant to another. Plants are generally most affected by superficial fungi after a long drouth, when the fibers of their roots are unable to imbibe sufficient moisture from the soil, and the plant thus becomes debilitated, and affords an easy prey to the parasite which attacks it. *The cure seems to be abundant watering.*

The internal mildew evidently cannot be communicated by the air, since it springs from the interior of the plant, but evidently being contagious. The only manner in which it appears probable that it can reach the interior is through the roots, by the seeds falling upon the earth which thus becomes contaminated, and consequently in this case, the cure for the first species of mildew, must have a contrary effect here, as water must materially aggravate the disease; as by exciting the plant to suck it up, it must increase the damage, the seeds of the fungi being drawn in with it. The only cure for this fungus is to take up the trees infected, wash the roots clean from every particle of soil, and replant them in a different part of the farm or garden. A Mr. Bauer (a scientific gentleman) has found that steeping grains of corn in lime water will produce the desired effect. There appears no cure for mildew in the roots, but by cutting off all communication between them and the field.

Such are the causes, and the cures, which the lecture of Dr. Lindley conveys as respects mildew. I have been obliged to omit much of the matter in the Gardeners' Magazine on the subject, in consequence of the multiplicity of plates inserted to elucidate the subject, but as far as letter press goes I think I have endeavored to convey the substance. Very respectfully,

ALEXANDER GORDON.

Rochester Nursery, August 19, 1833.

*Fungi forms a part of an order of plants in the lowest scale of creation, but the fungi possesses organs which are always re-productive. The number of fungi which may be conceived to exist is incalculable. In Sweden in the small space of a square furlong 2000 species were found to exist. A. G.

SUGAR FROM POTATOES.—The Cleveland (Ohio) Advertiser of Aug. 22, says that a small quantity of molasses was brought to that village last week, from Medina county, manufactured from *potatoes*. Eleven quarts of thick molasses was procured from a bushel and three pecks of potatoes. The flavor is pleasant, and the article equal in every respect to West India molasses.—The process of manufacturing is said to be simple, and not expensive.

For the Genesee Farmer.

THE HARVEST OF 1833 IN ONONDAGA COUNTY.

The crop of *Wheat* is most abundant, and the grain is of an excellent quality. Fifteen years ago wheat in this county was considered as of secondary importance; and it was even doubted by many whether we should ever be able to compete with the more western counties in the production of this valuable grain. These doubts are dispelled—an improved system of farming, which may in part be traced to the state and county agricultural societies, but more perhaps to the plaster and clover method of cultivation, has fully proved that much of the soil of Onondaga for the production of wheat, is equal to any in the state or union. Farmers with comparatively small means, now can raise a thousand bushels in a year, and to this fact may be attributed the rapid decrease of debt among the cultivators of the soil, and their visible advance in wealth and prosperity. It is strange that a country, where lime and gypsum are found in every section, and in such quantities, should have been deemed unsuited to the raising of that kind of grain to which in fact the first is indispensable, and the second a most valuable accessory. Yet such was long the opinion of many, and it was strenuously maintained, that from grass, and not from grain, the wealth of this county must spring. In no former year has the quantity of wheat grown equalled that of the present, and extensive preparations are made and making for the next. The insect termed the weevil—how properly we do not undertake to say—which has caused such loss in the eastern counties this season, has not appeared among us to any extent. Eight years since we were shown for the first time, a handful of wheat just taken from the stalk in the field, almost every kernel of which had been perforated, and we have since occasionally noticed it, but its appearance in this section is so rare, that no serious injury has ever resulted from it. Soaking and boiling seed wheat will we imagine prevent their increase and depredations, as well as secure the crop against smut to which in some of our newer sections of country this grain is still exposed.

Barley this year is not productive, and the crop we should think barely a medium one. The very dry weather of April was unfavorable to its taking root, and that sown early did not recover from the check it then experienced. What is grown however, is of fine quality, large berried, and heavy. Barley is to a considerable extent sown in this county as a preparatory crop for wheat, rather more we think than it will be, when the clover system is fully introduced. A crop of barley followed by one of wheat, will speedily exhaust the best soils unless liberally manured, and it does not afford a great profit except on soils of the finest qualities. This year it has suffered much from the fly, and there is some reason to apprehend that wheat sown after barley so infested, will be seriously injured by the insect another season.

Indian Corn promises but a poor remuneration for the labor bestowed upon it; the crop may be considered as a failure. There are but few pieces that are middling—none that we have seen, first rate, or such as Onondaga in other seasons has produced in abundance. A native of a warm climate, maize requires great and long continued heat, to bring it to perfection; and this season has been remarkable for the opposite qualities. June, and July, fell much short of their usual average degree of heat in this latitude, and this with a continual succession of rains, has put the most of our corn beyond recovery. Pieces planted in wet land have been abandoned after once hoeing, and others have been ploughed up as summer fallows. Corn is an important crop, as independent of its use by many of our citizens for bread, it is indispensable in the production of good pork. For this purpose no adequate substitute can be found. In ordinary seasons green corn may be had in plenty by the tenth of August; this year, this delicious article of food will grace few tables before the twentieth. The deficiency in corn, will this year, as it always does, increase the demand, and consequently enhance the price of other kinds of grain, and well fattened beef, or pork.

Peas, the culture of which had for several years past been mostly abandoned on account of the ravages of the bug, were again sown last year by some of our farmers, and the successful result, they being entirely free from insects, and bearing well, has much extended their cultivation the present year, and at this time their appearance is very favorable. Peas leave land in a very good condition for a wheat crop, and are perhaps the best substitute for corn in the fattening of pork. We may therefore expect its cultivation to increase until the bug shall again compel a relinquishment of the crop. We have heard it said, that sowing peas two years old would prevent injury from the bug; but we have had no experience to test the correctness of the remark.

There are few years in which there is a general failure of the *Oat* crop; hence it is justly considered as one of the most certain and valuable of our summer grains. As food for horses it has hitherto remained unrivaled, and in spite of experiments will probably maintain its ground.—This season has been one excellently adapted to the plant, moist and cool, and the growth and yield will consequently be heavy.

The burden of *Grass* this year is very great; and though some of it that has been mown may have been slightly injured by the rains, yet generally, what has been cut, has been secured in good condition. Farmers have been compelled in many cases to leave their grass standing, in order to secure their grain; but the frequent recurrence of showers will prevent much loss from this delay.

On the whole, the farmers of Onondaga have abundant cause for gratulation at the prospect before them. Their barns are literally filled to overflowing; and if some of their crops present a deficiency, it is more than compensated by the superior quantity and quality of others. With every prospect of an ample remuneration for their labor in the price of their produce—with peace and health around them, nothing but a grateful heart can be needed to make our farmers the happiest, as they certainly are the most independent, class of men in existence. W. G.

Otisco, Aug. 1833.

Mr. Webster is preparing a report fo his Pittsburg speech, that which has been published in the papers being incorrect.

For the Genesee Farmer.

THE BARBERRY NOT INJURIOUS TO WHEAT.

Messrs. L. Tucker & Co.—It is believed by many that the *Barberry bush* exercises an unfavorable influence upon Wheat growing in its vicinity, causing it to rust and shrink. If this be in fact the case, the shrub should undoubtedly be exterminated from those farms where wheat is cultivated. I, however, have many doubts of the existence of any such influence, notwithstanding the *cases* that have been reported. I proceed to give some of the reasons upon which my opinion is founded.

The first question to be examined seems to be this: What is generally the cause of wheat's shrinking? The proximate cause seems to be some disease with which the plant is effected, generally occasioned by too great and too rapid a growth of straw, by which it becomes too tender to endure the frequent and sudden changes of weather to which this country is subject. The energies of the plant are exhausted in the production of straw and leaves, a superabundance of juices is elaborated, and a change of temperature acting upon the tender vessels, bursts them, (causing rust) and as a natural consequence the seed cannot be perfected. It is possible indeed that Wheat with light straw may not fill; but it is believed that even then it results from a similar cause. Insects, by diverting the juices from their proper channel, or by poisoning them, will produce the same effect. Wheat is not the only plant thus effected by growing too large. Many by cultivation become monsters in size, but seem from that circumstance incapable of perfecting their seed, as for example, apples, pears, &c.

It seems, therefore, evident that the shrinking of Wheat must be occasioned by some disease, and that that disease is most frequently caused by changes of the weather acting upon the plant in unfavorable circumstances.

Now if the barberry bush cause the shrinking of Wheat, must it not be done by infecting it with some disease? It becomes then an important matter of inquiry how it is that this *Upas* exerts such an influence for so considerable a distance around it as has been asserted, uniformly injuring the crop of Wheat near it? A plant may be damaged by a noxious gas, by a want of pure air, by an excess or deficiency of light, heat, moisture, &c. Now I maintain that the barberry bush can effect no plant in its vicinity, except by the moisture and nourishment its roots take up, by its shade, or by some deleterious gas or vapor which it generates and exhales. There is no magic in it; every event has its cause. What gas is it that produces such wonderful effects—that damages wheat and *no other plant?* that is, moreover, so abundant that its influence is discovered in the open air at the distance of many rods, and yet is not perceptible to the senses, or by any other than this one effect? The leaves of plants give out oxygen, and perhaps hydrogen, but none will pretend that either of these is the invisible agent in this case. The flowers of plants exhale odoriferous particles which are often carried to a considerable distance. They consist chiefly of the volatile oils, and are for the most part pleasant to the sense. But can it be possible that these possess the power of doing such mischief? or if they have that power, have they such an

hostility to Wheat in particular as to infect that and no other plant? The absurdity of such a conjecture is very evident from the mere statement. Or is there any vapor, any combination of gases produced by this shrub while growing, that is in any manner different from that of other plants? Vegetables during decomposition do indeed give out gases that are extremely unfavorable to animal life, but at the same time, it is believed they constitute the proper food for other plants. Hence the utility of manure. But no plant while growing, however poisonous its juices and constituent parts may be under other circumstances, injures either animal or vegetable life while untouched. If indeed the uniformity of the operations of nature is departed from in the case of the barberry bush, so that other than the ordinary gases are exhaled by its organs, it is certainly an important fact in Vegetable Physiology—almost equal to that other extensively credited phenomenon, the changing of wheat into chess. Experiments should be instituted to detect such an insidious principle that operates unseen to destroy the hopes of the husbandmen, and rob him of the reward of his labor.

With regard to the facts which have been or may be adduced on this subject, they should be carefully and cautiously examined to see if in reality they have any bearing upon the question, and if any, how much? The fact that wheat has been sometimes or even generally damaged, where there have been barberry bushes, is not in itself conclusive evidence that that damage was caused by the proximity of the shrub; for wheat will very often shrink when it is not near. It is indeed so common, (particularly in a very rich soil,) that I am inclined to think it may be accounted for satisfactorily without imputing the blame to such a source. BERBERIS.

For the Genesee Farmer.

SLAVERY AND THE TARIFF.

Negro Slavery amongst our fellow citizens of the south, affords a subject for solemn contemplation. Until the horrible insurrection of *Nat Turner*, the discussion of any plan for the termination of that portentous state of things, or even to ameliorate the condition of the slaves, was proscribed. I am not disposed to intermeddle with their affairs. Whether the vast physical force which that black population must in a few years acquire, can be long restrained or not, is for their statesmen to consider; and if evils of that magnitude must have an end, it is for them to provide the mode. As associates in the same political compact however, we cannot be indifferent to their situation.

It is not to be denied that while the free states are prosperous, the old southern states, where the slave population is the densest, are on the decline. The difference is sufficiently remarkable. Southern politicians ascribe it to the unequal operation of the Tariff: they conclude that laws, under which one part of the Union *advances* on the track of prosperity, while another part *recedes*,—must be unjust; and the conclusion would be irresistible, were there no other causes to operate. Other causes there are however, in plenty,—all more or less dependent on Negro Slavery—a curse sufficient to blight the fairest prospects of any people.

In proof of this position, I offer the following paragraphs from an Agricultural Prize Essay, written by *C. H. Gooch*, Esquire, and lately published in the Virginia Farmer. He is a native and inhabitant of that state, a strenuous assertor of the right of holding slaves, a complainer of the Tariff, and consequently a competent witness:

"The possesion of slaves has had too great a tendency to make the owner and his family unwilling to take upon themselves any part of the drudgery of out-door business; and *too many of our people think it disreputable to labor.* We have been accustomed to be waited upon from our infancy, and consequently keep about us *too many wasteful and almost idle domestics.* Exempted from labor, and even from the common cares of business by the employment of agents, we imbibe habits and modes of thinking unfavorable to physical improvement or successful agriculture. The *unfinished houses* and *projects* half executed, which are *to be seen throughout the state*, are evidences of the meaning and truth of this remark. That the ease in which we have so long indulged, favors the attainment of literary and political knowledge and personal accomplishments, is manifest from the the acknowledged proficiency of Virginians in these respects. But while we are all politicians to a man, it is to be regretted that our achievements in the arts and sciences bear no just proportion to the opportunities we have had.——It is unfashionable for a genteel or educated Virginian to apply himself to the details and cares of the humble, but useful avocations of life.——

"The effects of slavery on our daughters [are] not less striking and pernicious.——

—— "*The white man who has to labor for his support, does it with an unwilling spirit.* He sees the exemption enjoyed by others; and if he does not fancy himself equally entitled to it, is too apt to repine at his lot, or migrate to some new state, where he will be upon a footing of greater equality with his neighbors.

"But independent of the enervating and paralizing effects of slavery upon all our *white population*, there are pecuniary losses arising from it, that are heavy drawbacks to the agriculturists. Most of the labors of agriculture have been confided to careless overseers, and still more careless operators. *The slave feels no inducement to execute his work with effect. He has a peculiar art of slighting it, and of seeming to be busy when in fact he is doing little or nothing. Nor can he be made to take proper care of stock, tools, or any thing else. He will rarely take care of his clothes, or his own health, much less of his companions when sick and requiring his aid and kindness. There is not perhaps, in nature a more heedless, thoughtless human being than a Virginia field negro.* With no care upon his mind, with warm clothing and plenty of food, under a good master, he is far the happier man of the two. His maxim is, "Come day, go day, God send Sunday." His abhorrence of the poor white man is very great. He may sometimes feel a *reflected* respect for him, in consequence of the confidence and esteem of his master and others. But this trait is as remarkable in the white as in the black man. All despise poverty and seem to worship wealth. To the losses which arise from the *dispositions* of our slaves, must be added those which are occasioned by their *habits. There seems to be almost an entire absence of moral principle among the mass of our colored population.——To steal and not be detected is a merit among them.*——And the vice which they hold in the greatest abhorrence is that of telling upon one another. There are many exceptions, it is true; though this description embraces more than the majority. *The numerous free negroes and worthless dissipated whites*, who have no visible means of support, and who *are rarely seen at work, derive their chief subsistence from the thefts of the slaves.* These thefts amount to a great deal in the course of the year, and operate like leeches on the fair income of agriculture. They vary, however, in every county and neighborhood in the exact proportion as the markets for the plunder vary. In the vicinities of towns and villages they are most serious. Besides the actual loss of property occasioned by them, they involve *the riding of our horses at night*, the corruption of the habits, and the injury of the health of the slaves: for whiskey is the price generally received for them.——

—— "It sometimes happens that *the head thief on a farm is in partnership with the overseer*; and when this is the case the husbandman has no chance for profit."

Such a system is sufficient to account for all the evils of which they complain. Extend it through the Genesee Country, and depopulation and poverty would pass over us like a blast.

But how does the Tariff injure them to our benefit? We are farmers as well as they. Their flour finds a market at the factories of the North as well as ours; and their cotton not less than our beef and pork. No law of the United States can transfer our prosperity to them, or raise them to our level. A *free* and *virtuous* population can only render them as prosperous. VINDEX.

For the Genesee Farmer.

REPLY TO PLOUGH JOGGER.

MESSRS. EDITORS—I have most attentively and carefully perused the reply of Plough Jogger, published in the Genesee Farmer of Aug. 17, to my communication on the subject of Plaster of Paris; and it now appears to devolve on me to answer some of his arguments and "plain facts." In doing so I have no possible wish to enter into a polemical contest with my opponent. I desire not to use offensive language; yet I must be permitted to say that the manner in which he takes up the subject, shows a want of frankness and candor, that must convince the intelligent reader of the great strait which he is driven to in support of his position. Let me quote his language—"Col. Hodge, in his reply to my communication, gives what he considers as the reason why plaster did not do well on my land. It is, however, mere guess work." Now the readers of the Farmer will recollect that Plough Jogger had given a particular account of a certain field, and that my remarks were founded on his own statement. So far from being mere guess work, my statement was founded solely on facts furnished by him. But, to carry out the subject, P. J. says that I have "dropped a remark to the very point, which shows that plaster is injurious, viz: that the large quantity of plaster first sown had exhausted the natural food for vegetables;" and this he calls "proof positive." The facts of the case were simply this: P. J. had stated that he sowed plaster on a certain field; his clover grew monstrous large; the third year he again applied plaster but it had no effect. In my reply I said, that, in the first place, he applied too large a quantity of plaster; this had the effect to lodge his grass; and the third year, "either the large quantity sown at first exhausted the natural food for vegetables, or what is much more probable, that it was applied so late in the season that it had no effect." Now if my opponent had not perverted my meaning, the facts would have been quite plain,—viz: that this field was a poor worn-out piece of land—that the large quantity of plaster applied had produced an overgrown crop the first year—a tolerable crop the second—that by this time the natural food for vegetables, viz. the manure and the vegetable matter composing the soil, had been received and exhausted by the vegetable plants—that is, the plaster had prepared this vegetable matter for the

food of plants, and thus this "sandy sterile field" had become exhausted.

It is not my design at this time to follow P. J. through all his reasonings on the appearance of "sorrel and moss," "wheat turning to chess"—"influence of the moon on vegetation"—comparing "plaster to ardent spirits," &c. &c. However contrary to reason his views may be on any of these subjects, it will not be expected that I shall reply to them, but passing over these auxiliaries that he has merely dragged in to support his position, and which have little bearing on the subject, I shall confine myself to the main question, relative to the use of plaster. P. J. says that "the fact that plaster does not possess the properties of manure, should lead every reflecting man to doubt the propriety of making use of it." In reply it may be said, that although plaster cannot be considered as a real manure, yet by its application on certain lands and on certain vegetables, it produces all the beneficial effects to be derived from barn-yard manure. The statement that many farmers have abandoned the use of plaster, on the discovery that it does not possess the properties of manure, requires proof. From the late information that I have been able to obtain, not one in an hundred have abandoned the use of it from any cause whatever. During the present season I have conversed with many individuals from various parts of the country on the subject of plaster, and I find on inquiry that it is much more extensively used than I was before aware of. Large quantities of it are used in various parts of the eastern states. In the several counties bordering on the Hudson river, in the vicinity of Albany, Schenectady, &c., it has been very extensively used, and much of the land has been very much increased in value by its application. It is very generally used in nearly every county in this state, and in order that the readers of the Farmer may more fully understand the subject, and that Plough Jogger may be able to judge how rapidly the "plaster mania is subsiding," I will here introduce a few extracts from a letter which I recently received from Wm. Garbutt, Esq., President of the Monroe County Agricultural Society:

"Plaster was discovered here (Wheatland, Monroe county,) in 1813 or 14; a few tons of it were broke by hand, and ground in a gristmill, tried and pronounced good by those who had been acquainted with the use of plaster. In 1816 it was broke and ground by the mill, and about thirty tons of it used in the neighborhood---in 1817, sixty tons,—in 18, one hundred and fifty, the consumption annually increasing as farmers became acquainted with its value. In 1832 there was eight hundred tons used, and in 1833, one thousand five hundred, but the supply was not near equal to the demand, and the fall business is yet to come, which is always considerable. There is now ample means for grinding, so that the supply in future will be abundant, and I have no doubt but that next season there will be over three thousand tons used. It is carried by teams thirty miles east, (east of that it is procured from Phelpstown and Cayuga,) south fifty miles, west to Buffalo and north to the lake. It is also taken by water to Ogdensburgh, Canada, Ohio and Michigan, but to these places the quantity has been small as there was not ground plaster to supply the home consumption, but wherever it has been introduced the demand has always increased.

"There was long a powerful prejudice against it there, but experience has entirely overcome it, as there is now only one farmer in this vicinity but who makes liberal use of it.

"The south of Wheatland and the north part of Caledonia the soil was naturally dry, poor and unproductive; crops of every description were light and the farms of little value; but the plentiful use of plaster and clover has completely changed the scene. The soil has become productive, the crops are abundant, and the farms very valuable; and I speak advisedly when I say, that the same ground now produces one third more per acre annually than it did previous to the use of plaster. Any dry ground that has a good retentive subsoil, can be made productive by the application of plaster and clover. The increased vegetation thus caused, enables the farmer to keep more stock and make much more manure, which increases his wealth, and gives him the means of substantially improving the soil, and at much less expense than carting manure from a distance.

"The paradoxical objection that plaster impoverishes the earth by making it produce bountiful crops, will apply with equal force against good tillage, but common sense might convince every one, that plentiful harvests by whatever cause produced, not only enriches the cultivator, but gives him the means of improving the soil.

"To every good cultivator of the soil who values manure and makes a proper application of it, plaster is of inestimable value; but to the farmer who is impoverishing the soil it is of little utility as it will not long produce vegetation unless the ground is previously prepared."

Were it necessary, I could here introduce the testimony of Judge Peters, Judge Buel, General Bradley, and a host of practical farmers, whose characters have deservedly stood high in their profession, and who have given their testimony decidedly in favor of plaster. But I will defer this for the present.

Plough Jogger refers to Pennsylvania, and says, "instead of the stimulant so freely used there fifteen or twenty years ago, now behold their fertile fields covered with quick-lime." In answer I reply that I have it from good authority that plaster is extensively used in many parts of Pennsylvania. It will be recollected that this was the residence of that distinguished agriculturist Judge Peters, who very highly recommended the use of plaster. It is a fact however that many farms in some parts of that state now make use of lime instead of plaster, not however because they discard the use of plaster, but simply because that lime is more readily procured.

Plough Jogger appears to find matter of exultation in the statement made by Onondaga, of the method adopted in turning in a clover ley one year and taking off a crop of wheat the next, "and thus obtaining one crop every two years." Whether "ten thousand practical farmers have grown rich in Onondaga" by pursuing this method is not for me to determine. But it is a practice that now very generally prevails in "Old Genesee," and in many other parts of the country. The Onondaga Agricultural Society have proposed the following question: "The practicability, the process of management, in connection with the use of clovor, the advantages and disadvantages of growing a crop of wheat every second year in a perpetual series on the same ground," Genesee Farmer, page 207. In order that this point may be definitely settled I will agree to submit it to the decision of that Society. Will P. J. agree to it?

In answer to P. J's. "plain facts," I reply, that plaster produces all the beneficial effects of manure. Where plaster is applied by a proper rotation of crops, the land will not become exhausted. It is not a fact that plaster kills the life of the land for after crops, any more than repeated cropping without the application of plaster. It is a fact that land is much less affected by drouth where plaster is applied. It is not a fact that grass seed will not vegetate where plaster is applied, but the reverse is the fact. "The fact that the plaster mania is subsiding," has already been pretty clearly answered in Mr. Garbutt's letter; however, in addition, I would state that a beautiful white plaster is now obtained at Venice, Ohio; a vessel load arrived at Buffalo last fall, and to such an extent did the "plaster mania" rage, that the whole cargo was soon disposed of to practical farmers, at the high price of $13 per ton, and moreover not a few of our farmers "went on, moon-blind," all the way to Wheatland, Monroe county, and there obtained loads of this "stimulating plaster." And although many of them have made use of it for ten or fifteen years, "yet so complete has been the delusion" that they have not yet "learnt by experience" that by so doing they are destroying the "life of their lands."

Whether Plough Jogger has succeeded in "driving the ploughshare of reason and common sense through the radical delusion of his opponents," is for the intelligent reader to determine. With perfect good feelings towards my opponent, I remain very respectfully,

BENJ. HODGE, Jr.

Buffalo Nursery, August 24, 1833.

For the Genesee Farmer.

THE HAY MACHINE.

I observe in an extract from an English publication, copied into the Genesee Farmer, page 182 of the current volume, a notice of a hay machine, which with a boy and horse can do as much work as eight men. It appears to be employed for the purpose of shaking the grass about as it passes to the state of hay, so as to present new surfaces to the sun, and also to allow the wind to pass more freely through it. Now can you inform me if it has been introduced into this country? and if so, the probable cost of the machine?

It must be of less consequence in this climate than in that of England where more than twice the length of time is required to convert grass into hay; but unless the machine is very expensive, I think it might also be employed to great advantage in this country; and especially in such *catching weather* as we have had through most of the present summer. If we can make hay twice as fast without a loss of manual labor, we gain a very important point; for many a ton may be taken in, which must otherwise be exposed to wet weather.

Ten years ago the horse rake and the threshing machine were hardly known in the Genesee Country, and now these are become indispensables among our farming utensils. I mention this to show that we have learned some things *very*

lately; and hence would infer the probability, that we may yet learn many other things.

A FARMER.

☞We should be glad to learn if any of the readers of the Genesee Farmer have one of the Machines alluded to, in the above communication, or whether they have ever been used in this country, that we might obtain a more particular description than is given in the notice of it heretofore published.—ED. GEN. FAR.

For the Genesee Farmer.

MESSRS. L. TUCKER & CO.—I am much pleased with the remarks of J. B. A. Guillemin and Doctor Biett, on the subject of Cholera, inasmuch as they corroborate my ideas of the origin of this disorder. The observation of Dr. Biett on administering Aloes, *the evacuations assumed a bilious appearance, and relief was immediately experienced*, fully substantiate my views, that this disorder (improperly called the Cholera) is in fact a bilious complaint. The dissections of Dr. Colman, Professor McNaughton, and many others, have confirmed me that a suspension of the bile is the principle cause of the disorder, and that it is only necessary to induce this to flow in its natural channels to obviate the complaint. Now as to the medicine.—Aloes is slow, and can only operate on the liver indirectly, whereas Gum Gamboge, taken in solution, operates instantly—taken in powder it operates very quick, and in the form of a pill, more slowly, but its operation is on the bile exclusively. I therefore deem it much better than Aloes in this complaint, which has spread such terror and devastation in Asia, Europe, and America.

Potter, August 17th, 1833. R. M. W.

IMPROVED STOCK—HORSES.

We take pleasure in transferring to our pages the following judicious remarks on a subject to which far too little attention has been paid in this section of our state. It is from the pen of the same writer to whom the public were indebted for an article on the improvement of Cattle, published in the Farmer of Aug. 10, p. 254.

From the Manlius Repository.

MR. MILLER—Although it is now late in the season, I beg leave, in addition to my article on the subject of horned cattle, to offer to my neighbors a few suggestions in relation to horses.

The horse in an animal of incalculable importance to us. His intrinsic value consists in his *power, speed* and *endurance*; and as he is to a great extent the subject of taste and fancy, his high value is attained when he unites beauty of form with these three requisites. But every farmer knows he is not to expect pears from the thorn bush, nor figs from the thistle. He is not to expect a pippin from the bramble bush, nor the greening from the wild Indian crab-apple. But then these stocks will sustain the pippin and the greening if such scions are introduced. Since, then, the same expense of care, culture, feed and time is needed to sustain and rear a four year old horse worth $60 and one worth $100, it is really astonishing that farmers, who spare no pains to procure the best quality of seed for grains, grass and roots, should still employ, as sires, the low-bred dung-hill, worth $2,50, instead of the brave and noble blood horse worth $20. The result in such case, as a general rule, must necessarily be, the colt will be a twenty shilling colt, instead of a twenty dollar colt, if nature proves true to her principles.

The farmer does not reflect sufficiently, nor judge correctly, on this subject. He seems to think a half blood sire, derived from a *blood horse* and *common dam*, may produce as fine stock, as the full blood horse himself; *whereas he cannot half so good.* Being only a half blood himself, he can infuse into his progeny only one fourth of the good qualities of his sire. His stock is only quarter bloods. No farmer, desirous of making the greatest gain in perfecting his stock, will use any horse as sire, who cannot claim to inherit in the line of his dam, as well as of his sire, *Power, Speed* and *Endurance*, the three items which give value to the horse. Hence it is, that the pedigree of our blood horses is given in the *line of the dam*, instead of the sire. It is to show, that the valuable blood of the horse, derived from his sire, is not reduced and depreciated by any impure, low blood, derived from the mother. A little reflection, therefore, will satisfy the farmer, not to breed from a horse, (although his sire may have been good,) in the hope or expectation of greatly improving or perfecting his stock, if he cannot at the same time claim excellence and value also from the blood of his dam. In this respect old Eclipse excels any horse of the present day; and to this source does he owe, in a good degree, his matchless powers. His dam was got by Messenger, whose stock for power and endurance, equals if not excels that of any horse ever brought to this country. Her dam, by a son of English Eclipse next to Childers, the fleetest horse ever known. His sire, Duroc, was by Diomed, the best horse of his day—deriving his excellence from judicious crosses, blending the best strains of English and Arabian blood. It is perfectly idle for a farmer, who has a mare of good size, and of fine quality and blood, to raise a colt from a common horse worth only $65 to $80 at four years old; when he can with the same labor, and expense of feed and care, raise one worth $120 to $150, by resorting to a better sire, at a cost of 5, 6, or $8 more. And even if his mare is in some respects inferior, he should still resort to horses of high and celebrated blood, of large size, just proportions and fine speed—horses, superior in those very particulars in which his mare is deficient. A half blood filley from such a cross, would probably make hereafter a stock mare, that might always produce colts worth $100, if sired by horses of the best forms, and best blood. In this way the farmer, who is unable or unwilling to be at the expense of purchasing a costly mare to commence with, is to obtain valuable brood mares hereafter.

Every farmer ought to have one or two good brood mares. We have the experience and testimony of intelligent men, that brood mares may be steadily and safely used until within a few days of foaling; and very soon after. They should not be improperly used and abused, by extreme, sudden, violent efforts. But it will not injure them, nor their foals, to do constant reasonable labor. In addition, therefore, to accomplishing the ordinary labor of a span of horses on the farm, they may produce the farmer annually a span of colts. It ought here to be remarked, that much of the value of our colts depends on the care and keeping we give them. We err much on this point. Colts generally are neglected the first winter. Their growth is retarded, and their forms are injured thereby. They should be kept in the best manner the first year; should be kept constantly thriving. Their forms will then be properly sustained, and their points and proportions be finely developed—nor should they be fed on the ground, but in racks so posited as to require them to extend and elevate the neck and head.

Dutchess county has derived a great revenue for many years from the annual sale of her valuable horses. Spans of horses, bred there, have been sold in New-York from $500 to $1,000; and multitudes of single horses from fifty to one hundred pounds. They secured these results by improving their stock of brood mares, in the use of such imported horses as Messenger, Highlander, Paymaster, Drone, Badjazette, and others—not hesitating to pay $20 or $25 to horses of such blood. The consequence has been, their brood mares were so much improved in quality as to produce, when blended with sires of this character, a stock of horses for market worth from $100 to $250 each.

I have said a horse, for a sire, was valuable as he possssed *Size, Power, Speed* and *Endurance*. As "like produces like," he is expected to impart these properties to his progeny. To decide whether he has power, speed and endurance, he is put to the trial on the race course. In a greater or less degree, his *Courage, Resolution, Temper and Constitution are imparted to his stock.* The farmer, who would make gain by breeding colts, should look to these things. His colts will always sell if they have *size* and *speed*, even if less perfect and beautiful in form. By blending the Arabian blood with that of the English race horse, the product is considered as perfected. It unites to the size and bone of the English race horse, the round, smooth, beautiful form of the Arabian, together with his hardiness, fleetness and ability to endure fatigue. By such crosses the fleetest and best horses have been produced, that have been ever known. *Sires of such size, and of such quality and blood, are here offered to the farmer at the present day.* But they are neglected by most breeders on account of price, and a resort is had to the low-bred horse, because of his reduced terms. While such is the fact, we can never perfect our stock of horses. While such is the practice, this splendid section of country, which ought to be first and foremost, will ever, in this respect, be second to Long Island and Dutchess. Our object should be, to obtain in the shorest possible time, a race of brood mares that can produce sixty pound colts, instead of $60 colts. This can be speedily done, by a resort to high bred horses, of the Eclipse, Messenger and Diomed blood.—But it cannot be done by low bred horses, who have no blood on the side of the dam, and who are removed to the third and fourth and fifth cross from the pure blood sire.

It will be recollected, there are two purposes for which we rear colts. One is for the plow, and one for the road. For the plow, stout, heavy, compact built horses are needed, with no special regard to fleetness. For the road, as for stages, pleasure carriages and the saddle, in addition to the size, power and form, *high courage* and *fleetness or speed*, are indispensable. If the farmer, therefore, designs to rear a colt for market, he must resort to a sire either celebrated himself, or in the line of his immediate ancestry, for fine action, and great speed as roadsters, in the hope that he will impart these properties to the stock. If for the plow, he will look for a sire possessing a *kind, docile, gentle temper, of good size, large bone and muscular powers.* As the stock will be, in a good measure characterized by the sire, the farmer will look for such qualities in the sire, as are especially adapted to the uses and purposes he has in view. If these few hints should influence the farmer to reflect on this subject, and be the means of inducing correct impressions, my purpose will have been answered.

Pompey, July 20, 1833. A FARMER.

NEW AGENTS FOR THE FARMER.

Jordan—Horace Blackmar.
Geneva—Dr. W. A. Townsend.
Homer—M. Ballard, Esq.
Kentucky and Ohio—N. L. Carpenter.
Syracuse—Maj. M. D. Burnet.
Lyons—R. H. Foster, P. M.
Canandaigua—Morse & Harvey.
Saneca Falls—A. Tyler, Esq.
East Bloomfield—Post Master.
do. Moses Fairchild, Esq.
Lima—Charles Ingersoll, P. M.
Caledonia—J. Clark, P. M.
Le Roy—E. Star.
Batavia—Sherman & Crandall.
Dansville—James Faulkner, P. M.

Rochester Prices Current.

Wheat, per bu.	91	Apples,	25a37
Flour, per brl.	5 00	Lard, cwt.	8 00
Pork, mess, brl.	16 00	Cheese do	6a9 00
do prime do	11 00	Butter	12½a15
Beef per cwt.	3a4 00	Hams do	7a8 50
Oats	34	Pot Ash, cwt.	3 50
Corn	63	Pearls,	3 75a4 00
Rye	75	Hides, cwt.	5 00
Barley	50a56	Sole Leather,	19a22 00

From the Foreign Quarterly Review.

INFLUENCE OF THE MOON.

Annuaire pour l'An 1833, *presente au Roi par le Bureau des Longitudes.* (*Notices Scientifiques par M. Arago.*) 18 mo. Paris.

Among the ancients the opinion was universally entertained that the different aspects of the moon furnish sure *prognostics* of the future state of the weather.

"If," says Aratus, "on the third day of the moon the horns of the crescent are sharp and well defined, the sky will continue serene during the whole of the month."

This is a notion which we believe to be very prevalent at the present day among the peasantry of Britain. The following is the commentary of Arago:

"In reality, when the moon in the evening begins to disengage herself from the sun's rays, she has always the form of a crescent, terminated by two very sharp horns; but if the atmosphere happens to be troubled, the horns appear enlarged. This enlargement, however, is a mere optical illusion, and is occasioned by strongly illuminated clouds, in apparent contact with the moon, and seeming to form a constituent part of her body. The fine extremities of the crescent are then lost as it were in the parasitical light which surrounds the moon, and becomes invisible to the naked eye. All this is rendered evident by employing a telescope, which destroys the illusion."

Many other aphorisms of the same nature might be quoted from Aratus, Theon, Theophratus, Pliny, and other ancient writers on rural affairs. But they may be dismissed with the general remark that they had their origin in that ignorance which confounds *signs* with *causes*, and are now disregarded, excepting by the most illiterate and credulous. They are besides at total variance with the theory of the influence of the phases.

The agency of the moon has not been confined, in popular opinion, to the changes of weather; she has been allowed in all ages and countries to exercise a direct and important influence on organic life. Many of the opinions vulgarly entertained on this head are curious, and are founded on well established facts; the error lying, not in the observations, but in the theory which makes the moon the *cause* of phenomena of which she is only the silent and unconcerned spectator. We may mention one or two of the most remarkable.

"It is generally believed, especially in the neighborhood of Paris, that the moon, in certain months, has a great influence on the phenomena of vegetation. This gardeners give the name of *red moon*, (lune rousse) to the moon which, beginning in April, becomes full either about the end of that month, or more usually in the course of May. In the months of April and May the moon, according to them, exercises a pernicious influence on the young shoots of plants. They maintain that they have observed during the night, when the sky is clear, the leaves and buds exposed to this light to become red, that is to say, to be frozen, although the thermometer, in the free atmosphere, stood several degrees above freezing point. They also assert, that if the rays of the moon are intercepted by clouds, and thereby prevented from reaching the plants, the same effects do not take place, under circumstances perfectly similar in other respects with regard to temperature. The phenomena seem to indicate that the light of our satellite is endowed with a certain frigorific influence; yet, on directing the most powerful burning glass or the largest reflectors towards the moon, and placing the most delicate thermometers in their foci, no effect has ever been observed which could justify so singular a conclusion. Hence with philosophers the effects of the April moon are now referred to the class of vulgar prejudices, while the gardeners remain convinced of the accuracy of their observations. A beautiful discovery made some years ago by Dr. Wells will enable us, I think, to reconcile two opinions in appearance so contradictory.

"No one had supposed, before Dr. Wells, that terrestrial substances, excepting in case of a very rapid evaporation, may require, during the night, a different temperature from that of the surrounding air. This important fact is now well ascertained. On placing little masses of cotton, down, &c. in the open air, it is frequently observed they acquire a temperature of six, seven, or even eight centigrade degrees below that of the surrounding atmosphere. The same is the case with vegetables. We cannot therefore judge of the degree of cold with which a plant is affected during the night by indications of a thermometer suspended on a free atmosphere; *the plant may be strongly frozen, although the air remains constantly several degrees above the freezing point.* These differences of temperature between solid bodies and the atmosphere only rise to six, seven or eight degrees of the contestimal thermometor, when the sky is perfectly clear. If the sky is clouded, they become insensible.

"It is now necessary to point out the connexion between these phenomena and the opinions of the country people regarding the April moon.

"In the nights of April and May the temperature of the atmosphere is frequently 4, 5 or 6 centigrade degrees above zero. When this happens, plants exposed to the moon—*that is to say, to a clear sky*—may be frozen, notwithstanding the indications of the thermometer. If the moon, on the contrary, does not shine—in short, if the sky is cloudy, the temperature of the plants does not fall below that of the atmosphere, and they will consequently not be frozen unless the thermometer indicates zero. It is therefore quite true, as the gardeners pretend, that under thermometrical circumstances precisely alike, a plant may be frozen or not, according as the moon may be visible or concealed behind clouds. If they are deceived, it is only in their conclusion, in attributing the effect of the light of the moon. The moon's light is, in this case, only the index of a clear atmosphere; it is only in consequence of the clearness of the sky that the nocturnal congelation of the plants takes place; the moon contributes to the effect in no way whatever; although she were hid under the horizon the effect would not be different."

The explanation here given is perfectly satisfactory, and may be extended to some other notions that have prevailed respecting the lunar influence. For example, it is said by Pliny and Plutarch, and is at the present day generally believed in the West Indies, that the moon sheds a copious humidity on bodies exposed to her rays, and that her light hastens the putrefaction of animal substances. This opinion is, to a certain exfent, countenanced by facts.

"A body exposed to the light of the moon, *that is to say, to a clear sky*, becomes, in consequence of its radiation, colder than the surrounding air. Under these circumstances the air deposits a portion of its humidity on the cold surface of the body, which is neither more nor less than the phenomena of dew, as analysed by Doctor Wells. Now, animal substances become much sooner putrid when moist than when dry. The observation of Pliny and Plutarch is therefore correct in all its details. It was only necessary to reform the theory, and acquit the moon of the mischief ascribed to her."

QUACK GRASS.

Mr. Editor—In answer to the inquiries of your correspondent A., respecting the best method of subduing *Quack Grass*, I submit a few remarks, the result of my observation and practice. Like all other *quacks*, it is extremely mischievous; and when it once gets rooted is very difficult to be eradicated.

The practice which is adopted by farmers generally, has not the effect to destroy this noxious grass, but rather occasions its spreading. For instance: a field or lot is ploughed for corn in the spring, and planted in the ordinary way; the quack very soon springs up and covers the corn, giving it a sickly appearance, and causing the process of hoeing to be laborious and to little purpose. The grass which is in and about the hill cannot be destroyed by the hoe, but after being cut up, very soon sprouts again, so that in the fall there are as many roots in the earth as at the commencement of hoeing. The next spring the ground is ploughed and sowed; the roots of the grass not being injured by ploughing, and the ground being in a light and mellow state, it vegetates immediately, and materially injures the growing crop.

My plan of operations for subduing is as follows: Plough the ground in the fall of the year, and the next spring harrow it well and then cross-plough it, which will break to pieces the principal part of the sward. Then harrow it a second time, and many of the roots will be drawn to the surface of the ground, in which state they should be left exposed a few days to the action of the sun. Plough again, which should be followed by a third harrowing, and the land will then be in a mellow state and good condition for planting. Pursue the same process the year following, and by manuring well you will be enabled to gather a large crop of potatoes. The quack grass will now be effectually subdued, and the land brought to a condition suitable for the reception of any kind of grain.

I managed a piece of land eleven years ago in the manner above recommended, and the grass has not become troublesome since. Perhaps it might be destroyed by pasturing very close two or three years, and it entirely disappear. Those farmers who have large flocks of sheep, can easily make a trial of the latter experiment. —*Columbia Sentinel.* S.

Rochester & Geneseo Steam Boat.—The spirit of enterprise appears to have received a fresh and we trust healthful impulse in this section of country within the last few weeks. The stock of the Tonawanda Rail Road Company, to the amount of half a million, was subscribed two weeks ago, and the subscription filled in less than three hours. We understand that since that subscription was filled, an association of gentleman have determined to build a Steam Boat, to ply on the Genesee River between Rochester and Geneseo; and that funds sufficient for that object were promptly subscribed, after it was satisfactorily ascertained that the navigation of the river in this way was practicable. Measures are taking for the immediate construction of such a boat and putting it in active operation.—*Rochester Inquirer.*

Roasting Potatoes.—A good and easy mode of roasting potatoes, apples or eggs, by steam:

Take your potatoes, or whatever you wish to roast, and after washing them clean, wrap them up in a paper two or three over; when this is done put them in a can of water, and squeeze them until the paper is wet to the potatoe; squeeze them well, and after making a place in the embers, lay them in, and cover them with hot ashes, with no coals; after they have lain a proper time, take them out, and the paper will be found to be perfectly dry, and not burnt, and on opening the paper it will be found to be very hot and damp the nearer you go to the potatoe; and the potatoe will be found to be soft and clean, and peal much easier and cleaner than when boiled. An Irish potatoe when boiled looses half its sweetness, but when prepared in this manner it does not lose its sweetness but is better tasted every way. Apples roasted in this way, are not like what they are when baked, black and burnt, but have a beautiful brown cast. Eggs prepared in this way are very tooth some, and will cook in less time than when boiling, with good embers.—*Southern Planter.*